

## ABSTRACT

Transmission of an audio signal is performed alternately in a first and a second condition in precisely timed sequence. In the first condition, the audio signal is inverted in frequency spectrum. In the second condition, the audio signal is normal. Due to this, a cryptographic apparatus is improved in security in communication. In a radio communication system linked to a radio network for transmitting an audio signal having been inverted in frequency spectrum to render the signal unintelligible, there are provided: a transmitter-side frequency spectrum inversion/non-inversion circuit including a frequency spectrum inversion circuit; a CPU for generating a control signal; a transmitter-side frequency spectrum inversion/non-inversion change-over switch; and, a sub-carrier oscillator. The CPU controls both the frequency spectrum inversion/non-inversion switch and the sub-carrier transmitter.